

Docket No.  
P07 42719

# Declaration For Patent Application

## English Language Declaration

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name,

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled

### GENETIC MARKER FOR SPONDYLOEPIMETAPHYSEAL DYSPLASIA

the specification of which

(check one)

☐ is attached hereto.

☒ was filed on 09/17/99 as United States Application No. or PCT International

Application Number 09/399,212

and was amended on —

(if applicable)

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose to the United States Patent and Trademark Office all information known to me to be material to patentability as defined in Title 37, Code of Federal Regulations, Section 1.56.

I hereby claim foreign priority benefits under Title 35, United States Code, Section 119(a)-(d) or Section 365(b) of any foreign application(s) for patent or inventor's certificate, or Section 365(a) of any PCT International application which designated at least one country other than the United States, listed below and have also identified below, by checking the box, any foreign application for patent or inventor's certificate or PCT International application having a filing date before that of the application on which priority is claimed.

Prior Foreign Application(s)

Priority Not Claimed

(Number)

(Country)

(Day/Month/Year Filed)

☐

(Number)

(Country)

(Day/Month/Year Filed)

☐

(Number)

(Country)

(Day/Month/Year Filed)

☐

I hereby claim the benefit under 35 U.S.C. Section 119(e) of any United States provisional application(s) listed below:

\_\_\_\_\_  
(Application Serial No.)

\_\_\_\_\_  
(Filing Date)

\_\_\_\_\_  
(Application Serial No.)

\_\_\_\_\_  
(Filing Date)

\_\_\_\_\_  
(Application Serial No.)

\_\_\_\_\_  
(Filing Date)

I hereby claim the benefit under 35 U. S. C. Section 120 of any United States application(s), or Section 365(c) of any PCT International application designating the United States, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT International application in the manner provided by the first paragraph of 35 U.S.C. Section 112, I acknowledge the duty to disclose to the United States Patent and Trademark Office all information known to me to be material to patentability as defined in Title 37, CFR Section 1.56 which became available between the filing date of the prior application and the national or PCT International filing date of this application:

\_\_\_\_\_  
(Application Serial No.)

\_\_\_\_\_  
(Filing Date)

\_\_\_\_\_  
(Status)  
(patented, pending, abandoned)

\_\_\_\_\_  
(Application Serial No.)

\_\_\_\_\_  
(Filing Date)

\_\_\_\_\_  
(Status)  
(patented, pending, abandoned)

\_\_\_\_\_  
(Application Serial No.)

\_\_\_\_\_  
(Filing Date)

\_\_\_\_\_  
(Status)  
(patented, pending, abandoned)

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full name of sole or first inventor <b>DANIEL H. COHN</b>	
Sole or first inventor's signature <i>Daniel H. Cohn</i>	Date 11/17/99
Residence <b>538 14th STREET, SANTA MONICA, CA 90402</b>	
Citizenship <b>UNITED STATES</b>	
Post Office Address <b>SAME AS ABOVE</b>	

Full name of second inventor, if any <b>MUHAMMAD FAIYAZ-UL-HAQUE</b>	
Second inventor's signature	Date
Residence <b>HOUSE #250, STREET #31, SECTOR 1-8/2, ISLAMABAD, PAKISTAN</b>	
Citizenship <b>PAKISTAN</b>	
Post Office Address <b>SAME AS ABOVE</b>	

Full name of third inventor, if any <b>LILY KING</b>	
Third inventor's signature <i>Lily King</i>	Date 11-17-99
Residence <b>5766 WEST OLYMPIC BOULEVARD, LOS ANGELES, CA 90036</b>	
Citizenship <b>UNITED STATES</b>	
Post Office Address <b>SAME AS ABOVE</b>	

Full name of fourth inventor, if any <b>DEBORAH KRAKOW</b>	
Fourth inventor's signature <i>Deborah Krakow</i>	Date 11/17/99
Residence <b>10828 WELLWORTH AVENUE, LOS ANGELES, CA 90024</b>	
Citizenship <b>UNITED STATES</b>	
Post Office Address <b>SAME AS ABOVE</b>	

Docket No.  
P07 42719

# Declaration For Patent Application

## English Language Declaration

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name,

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled

### GENETIC MARKER FOR SPONDYLOEPIMETAPHYSEAL DYSPLASIA

the specification of which

(check one)

☐ is attached hereto.

☒ was filed on 09/17/99 as United States Application No. or PCT International Application Number 09/399,212 and was amended on \_\_\_\_\_

(if applicable)

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose to the United States Patent and Trademark Office all information known to me to be material to patentability as defined in Title 37, Code of Federal Regulations, Section 1.56.

I hereby claim foreign priority benefits under Title 35, United States Code, Section 119(a)-(d) or Section 365(b) of any foreign application(s) for patent or inventor's certificate, or Section 365(a) of any PCT International application which designated at least one country other than the United States, listed below and have also identified below, by checking the box, any foreign application for patent or inventor's certificate or PCT International application having a filing date before that of the application on which priority is claimed.

Prior Foreign Application(s)

Priority Not Claimed

(Number)

(Country)

(Day/Month/Year Filed)

☐

(Number)

(Country)

(Day/Month/Year Filed)

☐

(Number)

(Country)

(Day/Month/Year Filed)

☐

I hereby claim the benefit under 35 U.S.C. Section 119(e) of any United States provisional application(s) listed below:

\_\_\_\_\_  
(Application Serial No.)

\_\_\_\_\_  
(Filing Date)

\_\_\_\_\_  
(Application Serial No.)

\_\_\_\_\_  
(Filing Date)

\_\_\_\_\_  
(Application Serial No.)

\_\_\_\_\_  
(Filing Date)

I hereby claim the benefit under 35 U. S. C. Section 120 of any United States application(s), or Section 365(c) of any PCT International application designating the United States, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT International application in the manner provided by the first paragraph of 35 U.S.C. Section 112, I acknowledge the duty to disclose to the United States Patent and Trademark Office all information known to me to be material to patentability as defined in Title 37, CFR Section 1.56 which became available between the filing date of the prior application and the national or PCT International filing date of this application:

\_\_\_\_\_  
(Application Serial No.)

\_\_\_\_\_  
(Filing Date)

\_\_\_\_\_  
(Status)  
(patented, pending, abandoned)

\_\_\_\_\_  
(Application Serial No.)

\_\_\_\_\_  
(Filing Date)

\_\_\_\_\_  
(Status)  
(patented, pending, abandoned)

\_\_\_\_\_  
(Application Serial No.)

\_\_\_\_\_  
(Filing Date)

\_\_\_\_\_  
(Status)  
(patented, pending, abandoned)

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full name of sole or first inventor <b>DANIEL H. COHN</b>	
Sole or first inventor's signature	Date
Residence <b>538 14th STREET, SANTA MONICA, CA 90402</b>	
Citizenship <b>UNITED STATES</b>	
Post Office Address <b>SAME AS ABOVE</b>	

Full name of second inventor, if any <b>MUHAMMAD FAIYAZ-UL-HAQUE</b>	
Second inventor's signature <i>M. Faiyaz-ul-Haque</i>	Date <b>5th November, 1999</b>
Residence <b>HOUSE #250, STREET #31, SECTOR I-8/2, ISLAMABAD, PAKISTAN</b>	
Citizenship <b>PAKISTAN</b>	
Post Office Address <b>SAME AS ABOVE</b>	

Full name of third inventor, if any <b>LILY KING</b>	
Third inventor's signature	Date
Residence <b>5766 WEST OLYMPIC BOULEVARD, LOS ANGELES, CA 90036</b>	
Citizenship <b>UNITED STATES</b>	
Post Office Address <b>SAME AS ABOVE</b>	

Full name of fourth inventor, if any <b>DEBORAH KRAKOW</b>	
Fourth inventor's signature	Date
Residence <b>10828 WELLWORTH AVENUE, LOS ANGELES, CA 90024</b>	
Citizenship <b>UNITED STATES</b>	
Post Office Address <b>SAME AS ABOVE</b>	

July 2, 2001


IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Daniel H. Cohn, Muhammad Faiyaz ul Haque, Lily M. King and  
Deborah Krakow  
Serial No. UNASSIGNED  
Filed: Herewith  
For: 3-PHOSPHOADENOSINE-5-PHOSPHOSULFATE (PAPS)  
SYNTHETASE PROTEINS AND METHODS FOR TREATING  
OSTEOARTHRITIC DISORDERS

Examiner: Unknown

Unit: --

**DECLARATION UNDER 37 C.F.R. § 1.821 (f) (g)**

CERTIFICATE OF EXPRESS MAILING		
<small>I HEREBY CERTIFY THAT THIS PAPER OR FEE IS BEING DEPOSITED WITH THE UNITED STATES POSTAL SERVICE "EXPRESS MAIL POST OFFICE TO ADDRESSEE" SERVICE UNDER 37 CFR 1.10 ON THE DATE AND LABEL INDICATED BELOW AND IS ADDRESSED TO BOX PATENT APPLICATION, THE ASSISTANT COMMISSIONER FOR PATENTS, WASHINGTON, D. C. 20231--</small>		
<b>July 2, 2001</b>		<b>EL 900688417 US</b>
Date of Deposit and Signature	Ann Weiss	Express Label No.

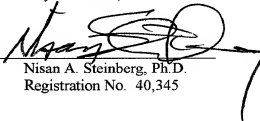
BOX PATENT APPLICATION  
Assistant Commissioner for Patents  
Washington, D. C. 20231

Dear Sir:

I, Nisan A. Steinberg, Ph.D., hereby state, as required by 37 C.F.R. § 1.821(f), that the content of the paper and computer readable copies of the enclosed sequence listing, submitted in accordance with 37 C.F.R. § 1.821(c) and (e), respectively, are to the best of my knowledge, the same, and are the same as the sequences disclosed in the application as filed.

I hereby also state, as required by 37 C.F.R. § 1.821(g), that to the best of my knowledge, the enclosed submission includes no new matter.

Respectfully submitted,

By:   
Nisan A. Steinberg, Ph.D.  
Registration No. 40,345

SIDLEY AUSTIN BROWN & WOOD  
555 West Fifth Street  
Los Angeles, California 90013-1010  
Ofc: 213/ 896-6665  
Fax: 213/896-6600

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Daniel H. Cohn, Muhammad Faiyaz ul Haque, Lily M. King, and Deborah Krakow  
 Serial No. 09/399,212  
 Filed: September 17, 1999  
 For: GENETIC MARKER FOR SPONDYLOEPIMETAPHYSEAL DYSPLASIA

Examiner: Unassigned  
 Unit: 1643

**CERTIFICATE UNDER 37 C.F.R. 3.73(b)  
 ESTABLISHING RIGHT OF ASSIGNEE TO PROSECUTE**

Assistant Commissioner for Patents

Washington, D. C. 20231

I HEREBY CERTIFY THAT THIS CORRESPONDENCE IS BEING DEPOSITED WITH THE UNITED STATES POSTAL SERVICE AS FIRST CLASS MAIL IN AN ENVELOPE ADDRESSED TO THE ASSISTANT COMMISSIONER FOR PATENTS WASHINGTON, D. C. 20231, ON <u>11/19/99</u>	
BY <u>[Signature]</u>	DATE <u>11/19/99</u>
[Signature] <u>11/19/99</u> (DATE OF SIGNATURE)	

Sir:

Cedars-Sinai Medical Center

certifies that it is the assignee of the entire right, title and interest in the patent application identified above by virtue of chain of title from the inventor, of the patent application identified above, to the current assignee as shown below:

- From: Daniel H. Cohn, Muhammad Faiyaz ul Haque,  
 Lily M. King, and Deborah Krakow  
 To: Cedars-Sinai Medical Center

The document is being filed herewith with the the Patent and Trademark Office. A copy thereof is attached.

The undersigned (whose title is supplied below) is empowered to sign this certificate on behalf of the assignee.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further, that these statements are made with the knowledge that willful false statements, and the like so made, are punishable by fine or imprisonment, or both, under Section 1001, Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Date: 11/17/99  
 Name: Peter E. Braveman, Esq.

Title: Senior Vice President for Legal Affairs and General Counsel

Signature: [Signature]



**CERTIFICATE OF MAILING L. A. FIRST CLASS MAIL (37 CFR 1.8)**

Applicant(s): Daniel H. Cohn et al.

Docket No.

P07 42719

Serial No.  
09/399,212Filing Date  
09/17/99Examiner  
Not AssignedGroup Art Unit  
1643

Invention:

**GENETIC MARKER FOR SPONDYLOEPIMETAPHYSEAL DYSPLASIA**I hereby certify that this Verified Statement (Declaration) Claiming Small Entity Status*(Identify type of correspondence)*

is being deposited with the United States Postal Service as first class mail in an envelope addressed to: The

Assistant Commissioner for Patents, Washington, D.C. 20231 on

11/19/99*(Date)*ANN WEISS*(Typed or Printed Name of Person Mailing Correspondence)*  
*(Signature of Person Mailing Correspondence)***Note: Each paper must have its own certificate of mailing.**

**VERIFIED STATEMENT (DECLARATION) CLAIMING SMALL ENTITY  
STATUS (37 CFR 1.9(f) AND 1.27 (d)) - NONPROFIT ORGANIZATION**

Docket No.  
P07 42719

Serial No.  
09/399,212

Filing Date  
09/17/99

Patent No.  
—

Issue Date  
—

Applicant/ **DANIEL H. COHN ET AL.**  
Patentee:

Invention:

**GENETIC MARKER FOR SPONDYLOEPIMETAPHYSEAL DYSPLASIA**

I hereby declare that I am an official empowered to act on behalf of the nonprofit organization identified below:

NAME OF ORGANIZATION: **CEDARS-SINAI MEDICAL CENTER**

ADDRESS OF ORGANIZATION: **8700 BEVERLY BOULEVARD**  
**LOS ANGELES, CA 90048-1869**
**TYPE OF NONPROFIT ORGANIZATION:**

- ☐ University or other Institute of Higher Education
- ☒ Tax Exempt under Internal Revenue Service Code (26 U.S.C. 501(a) and 501(c)(3))
- ☐ Nonprofit Scientific or Educational under Statute of State of The United States of America  
Name of State: Citation of Statute:
- ☐ Would Qualify as Tax Exempt under Internal Revenue Service Code (26 U.S.C. 501(a) and 501(c)(3)) if Located in The United States of America
- ☐ Would Qualify as Nonprofit Scientific or Educational under Statute of State of The United States of America if Located in The United States of America  
Name of State: Citation of Statute:

I hereby declare that the above-identified nonprofit organization qualifies as a nonprofit organization as defined in 37 C.F.R. 1.9(e) for purposes of paying reduced fees to the United States Patent and Trademark Office regarding the invention described in:

- ☐ the specification to be filed herewith.
- ☒ the application identified above.
- ☐ the patent identified above.

I hereby declare that rights under contract or law have been conveyed to and remain with the nonprofit organization with regard to the above identified invention.

If the rights held by the above-identified nonprofit organization are not exclusive, each individual, concern or organization having rights to the invention is listed on the next page and no rights to the invention are held by any person, other than the inventor, who could not qualify as an independent inventor under 37 CFR 1.9(c) or by any concern which would not qualify as a small business concern under 37 CFR 1.9(d) or a nonprofit organization under 37 CFR 1.9(e).

Each person, concern or organization to which I have assigned, granted, conveyed, or licensed or am under an obligation under contract or law to assign, grant, convey, or license any rights in the invention is listed below:

- ☒ no such person, concern or organization exists.  
☐ each such person, concern or organization is listed below.

FULL NAME \_\_\_\_\_  
 ADDRESS \_\_\_\_\_

☐ Individual ☐ Small Business Concern ☐ Nonprofit Organization

FULL NAME \_\_\_\_\_  
 ADDRESS \_\_\_\_\_

☐ Individual ☐ Small Business Concern ☐ Nonprofit Organization

FULL NAME \_\_\_\_\_  
 ADDRESS \_\_\_\_\_

☐ Individual ☐ Small Business Concern ☐ Nonprofit Organization

FULL NAME \_\_\_\_\_  
 ADDRESS \_\_\_\_\_

☐ Individual ☐ Small Business Concern ☐ Nonprofit Organization

Separate verified statements are required from each named person, concern or organization having rights to the invention averring to their status as small entities. (37 CFR 1.27)

I acknowledge the duty to file, in this application or patent, notification of any change in status resulting in loss of entitlement to small entity status prior to paying, or at the time of paying, the earliest of the issue fee or any maintenance fee due after the date on which status as a small entity is no longer appropriate. (37 CFR 1.28(b))

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application, any patent issuing thereon, or any patent to which this verified statement is directed.

NAME OF PERSON SIGNING: PETER E. BRAVEMAN, ESQ.

TITLE IN ORGANIZATION: Senior Vice-President for Legal Affairs and General Counsel

ADDRESS OF PERSON SIGNING: 8700 Beverly Boulevard  
Los Angeles, CA 90048-1869

SIGNATURE: \_\_\_\_\_

DATE: \_\_\_\_\_

11/12/99

# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

## REVOCATION OF PRIOR POWERS AND NEW POWER OF ATTORNEY

Assistant Commissioner for  
Patents  
Washington, DC 20231

**CERTIFICATE OF MAILING UNDER 37 C.F.R. § 1.5**  
I hereby certify that this document is being deposited on this date with the U.S. Postal Service at first class mail in an envelope addressed to: Assistant Commissioner for Patents, Washington, DC 20231.

*John R. Sullivan*

Date: 5-2-01

Honorable Sir:

Cedars-Sinai Medical Center, having a place of business at 8700 Beverly Boulevard, Suite 2112, Los Angeles, California 90048-1686, and being the owner of the entire right, title and interest to the patent applications identified on the attached list, hereby revokes all previously given powers of attorney for the applications listed on attached sheet, and hereby appoints the following:

### Attorney

Edward G. Poplawski  
Denise L. McKenzie  
Nathan A. Steinberg, Ph.D.

### Registration No.

33,438  
43,790  
40,348

all of whom are members in good standing of a state bar, and are members of the law firm of Sidley Austin Brown & Wood, 555 West Fifth Street, Los Angeles, California 90013-1010 at (213) 898-9000, its representatives with full power of substitution and revocation, to transact all business in the United States Patent and Trademark Office connected therewith.

Effective immediately, please change the correspondence address related to the identified patent applications on the attached sheet:

from: Pretty, Schroeder, et al.  
444 South Flower Street  
Los Angeles, California 90071

to: Edward G. Poplawski, Esq.  
Sidley Austin Brown & Wood  
555 West Fifth Street  
Los Angeles, California 90013-1010

and direct all future correspondence to the above address; and refer all telephone communications to Edward G. Poplawski at (213) 898-9001.

**CEDARS-SINAI MEDICAL CENTER**

Dated: May 2, 2001 2001

By:

*Peter E. Braveman*

Peter E. Braveman  
Senior Vice President for Legal Affairs and General Counsel

## ASSIGNMENT

WHEREAS, Daniel H. Cohn of Santa Monica, CA, Muhammad Faiyaz ul Haque of Islamabad, Pakistan, Lily M. King of Los Angeles, CA, and Deborah Krakow of Los Angeles, CA., Assignors, have invented a new and useful GENETIC MARKER FOR SPONDYLOEPIMETAPHYSEAL DYSPLASIA for which an application for United States Letters Patent, Serial No. 09/399,212, filed September 17, 1999, was executed by them on or about the same date as this Assignment; and

WHEREAS, Assignors believe themselves to be the original, first and joint inventors of the invention disclosed and claimed in the application for Letters Patent; and

WHEREAS, CEDARS-SINAI MEDICAL CENTER, a California non-profit organization, having a place of business at 8700 Beverly Boulevard, Los Angeles, CA 90048-1869, Assignee, desires to acquire by formal, recordable assignment the entire right, title and interest in and to the invention, the application, and any Letters Patent that might be granted for the invention in the United States and throughout the world;

NOW, THEREFORE, in consideration of the sum of Ten Dollars (\$10.00) and of other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Assignors hereby sell, assign and transfer to Assignee, the entire right, title and interest in and to the invention, the application, and any Letters Patent that might be granted for the invention in the United States and throughout the world, including the right to file foreign applications directly in the name of Assignee and to claim for any such foreign applications any priority rights to which such applications are entitled under international conventions, treaties or otherwise.

Further, Assignors agree that, upon request and without further compensation, but at no expense to Assignor, they and their legal representatives and assigns will perform all lawful acts, including the execution of papers and the giving of testimony, that might be necessary or desirable for obtaining, sustaining, reissuing or enforcing Letters Patent in the United States and throughout the world for the invention, and for perfecting, recording or maintaining the title of Assignee, its successors and assigns, to the invention, the application, and any Letters Patent granted for the invention in the United States and throughout the world.

Assignors represent and warrant that they have not granted and will not grant to others any rights inconsistent with the rights granted by this Assignment.

Assignors authorize and request the Commissioner of Patents and Trademarks of the United States and of all foreign countries to issue any Letters Patent granted for the invention, whether on the application or on any subsequently filed division, continuation, continuation-in-part or reissue application, to Assignee, its successors and assigns, as the assignee of the entire interest in the invention.

IN WITNESS WHEREOF, Assignors have executed this Assignment.

Assignors

Date: 11/17/99

Daniel H. Cohn

Date: 11/17/99

his

Date: 11/17/99

Danorah Krawow

Date: \_\_\_\_\_

\_\_\_\_\_

State of California)  
County of Los Angeles) ss.

On this 17<sup>th</sup> day of November, in the year of 1999, before me personally appeared **Daniel H. Cohn**, personally known to me or proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to this instrument, and acknowledged to me that he executed it.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year of this certificate first above written.

June-ellen Miller  
Notary Public in and for Said  
County and State



State of \_\_\_\_\_)

) ss.

County of \_\_\_\_\_)

On this \_\_\_\_\_ day of \_\_\_\_\_, in the year of 1999, before me personally appeared **Muhammad Faiyaz ul Haque**, personally known to me or proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to this instrument, and acknowledged to me that he executed it.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year of this certificate first above written.

\_\_\_\_\_  
Notary Public in and for Said

County and State

State of California)

) ss.

County of Los Angeles

On this 17<sup>th</sup> day of November, in the year of 1999, before me personally appeared **Lily M. King**, personally known to me or proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to this instrument, and acknowledged to me that he executed it.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year of this certificate first above written.

State of California

) ss.

County of Los Angeles

On this 7th day of November, in the year of 1999, before me personally appeared **Deborah Krakow**, personally known to me or proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to this instrument, and acknowledged to me that he executed it.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year of this certificate first above written.

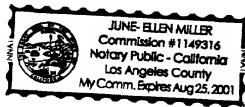
June- Ellen Miller

Notary Public in and for Said  
County and State



June- Ellen Miller

Notary Public in and for Said  
County and State





## ASSIGNMENT

WHEREAS, Daniel H. Cohn of Santa Monica, CA, Muhammad Faiyaz ul Haque of Islamabad, Pakistan, Lily M. King of Los Angeles, CA, and Deborah Krakow of Los Angeles, CA., Assignors, have invented a new and useful GENETIC MARKER FOR SPONDYLOEPIMETAPHYSEAL DYSPLASIA for which an application for United States Letters Patent, Serial No. 09/399,212, filed September 17, 1999, was executed by them on or about the same date as this Assignment; and

WHEREAS, Assignors believe themselves to be the original, first and joint inventors of the invention disclosed and claimed in the application for Letters Patent; and

WHEREAS, CEDARS-SINAI MEDICAL CENTER, a California non-profit organization, having a place of business at 8700 Beverly Boulevard, Los Angeles, CA 90048-1869, Assignee, desires to acquire by formal, recordable assignment the entire right, title and interest in and to the invention, the application, and any Letters Patent that might be granted for the invention in the United States and throughout the world;

NOW, THEREFORE, in consideration of the sum of Ten Dollars (\$10.00) and of other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Assignors hereby sell, assign and transfer to Assignee, the entire right, title and interest in and to the invention, the application, and any Letters Patent that might be granted for the invention in the United States and throughout the world, including the right to file foreign applications directly in the name of Assignee and to claim for any such foreign applications any priority rights to which such applications are entitled under international conventions, treaties or otherwise.

Further, Assignors agree that, upon request and without further compensation, but at no expense to Assignor, they and their legal representatives and assigns will perform all lawful acts, including the execution of papers and the giving of testimony, that might be necessary or desirable for obtaining, sustaining, reissuing or enforcing Letters Patent in the United States and throughout the world for the invention, and for perfecting, recording or maintaining the title of Assignee, its successors and assigns, to the invention, the application, and any Letters Patent granted for the invention in the United States and throughout the world.

Assignors represent and warrant that they have not granted and will not grant to others any rights inconsistent with the rights granted by this Assignment.

02031

## Assignors

N. G. 14

---

---

.....

) ss.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year of this certificate first above written.

7773.1

State of Illinois

County of Cook ) ss.

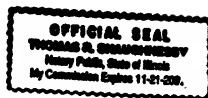
On this 5<sup>th</sup> day of November, in the year of 1999, before me personally appeared **Muhammad Faiyaz ul Haque**, personally known to me or proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to this instrument, and acknowledged to me that he executed it.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year of this certificate first above written.

Thomas R. Shaughnessy

Notary Public in and for Said

County and State



State of \_\_\_\_\_

) ss.

County of \_\_\_\_\_

On this \_\_\_\_\_ day of \_\_\_\_\_, in the year of 1999, before me personally appeared **Lily M. King**, personally known to me or proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to this instrument, and acknowledged to me that he executed it.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year of this certificate first above written.